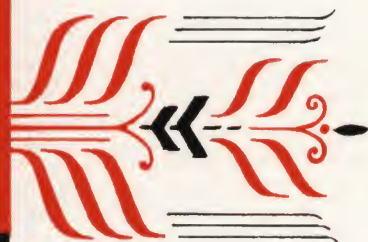


FOR
OFFICES
APARTMENTS
HOSPITALS
HOMES
HOTELS
CLUBS
BANKS
STORES
AND
OTHER
PUBLIC
BUILDINGS
USE

RAY



RAY

HEAVY FUEL OIL

automatic

BURNERS

with the

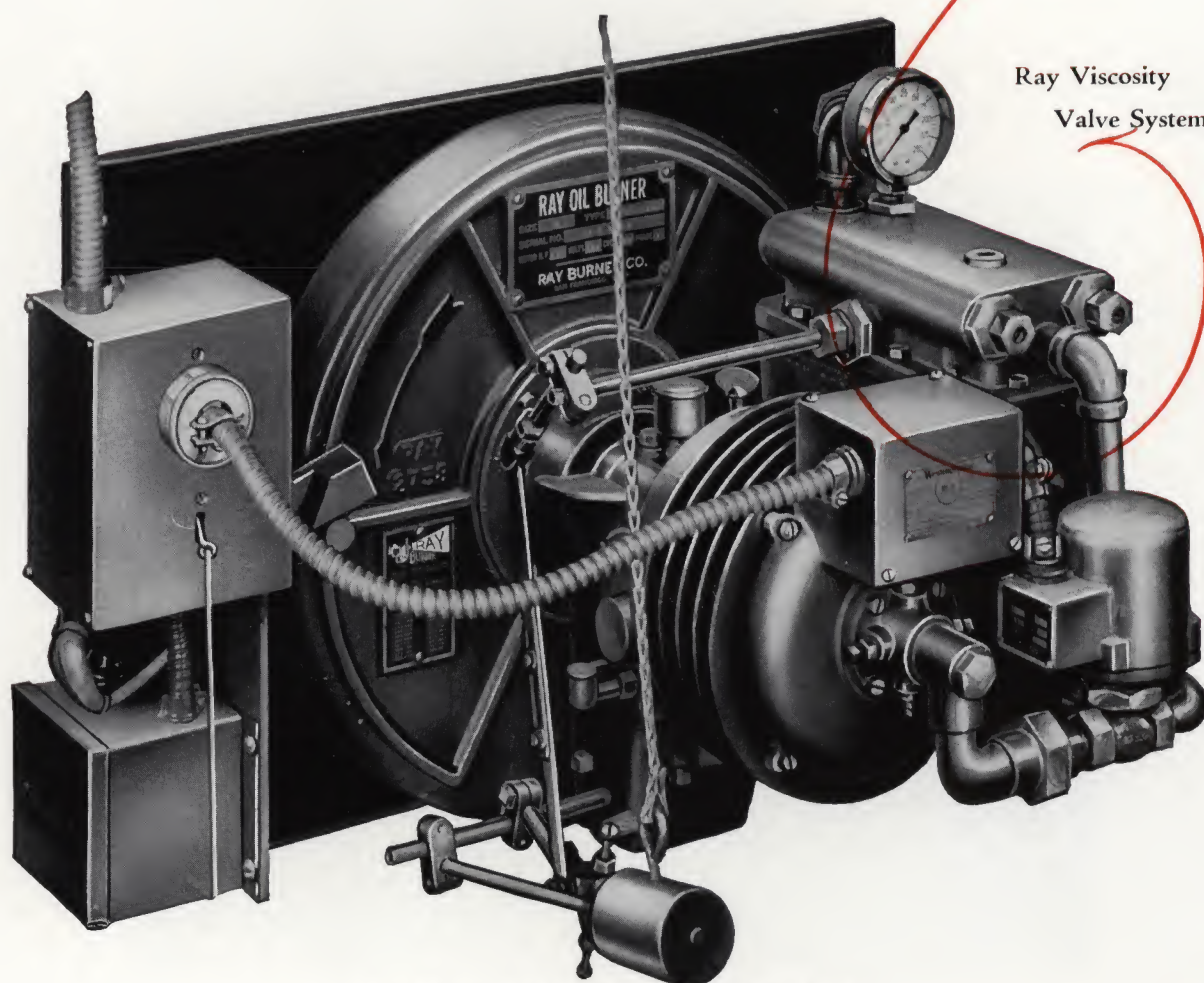
RAY

VISCOSITY SYSTEM



Are You Burning the Cheapest Fuel Oil?

The time to think about how you will answer this question is before you buy an oil burner. The principal cost of operating an oil burner is the cost of fuel. It logically follows that only by using cheaper fuel, or less fuel, can an important reduction in the operating cost be made. The most desirable fuel oils are those classified as Commercial Standard Grades No. 5 or No. 6. Not only do these grades usually cost less per gallon, but even more important than their low price is the fact that they actually contain from 4% to 6% more heat than the medium domestic grades. It is to your interest to be sure that the automatic oil burner you buy can burn No. 5 or No. 6 oil successfully.



Ray Viscosity
Valve System

Ray Heavy Fuel Oil Automatic Type AR-131

Ray Heavy Fuel Oil Automatic Burners

equipped with

Ray Viscosity Valve System

Ray Heavy Fuel Oil Automatic Burners, equipped with Ray Viscosity Valve System, save money for their owners, because they burn the cheapest and heaviest grades of fuel oil automatically. Though a few other automatic burners are represented as suitable for heavy fuel oil, the Ray is the only one to burn satisfactorily, economically, with unfailing uniformity of flame and regardless of variations in viscosity or temperature of the oil, any No. 5 or No. 6 fuel oil that can be pumped.

Those experienced with automatic oil burners will recognize that the resulting reduction in oil burning costs make this the most important announcement any oil burner manufacturer has made during the last five years.

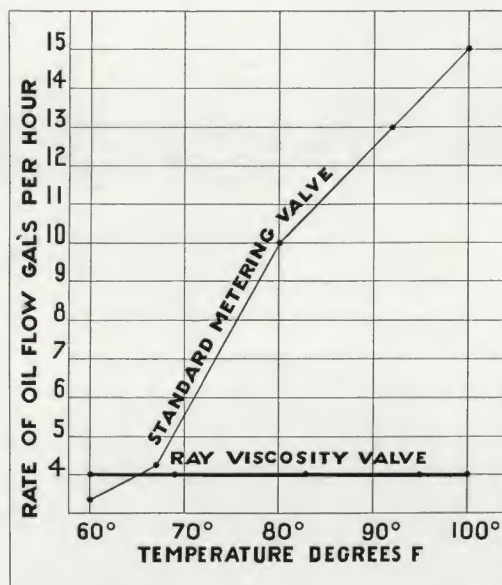
If you are owner of a large home, apartment, commercial building, or other quantity user of heat, regardless of what fuel or equipment you are now using, you owe it to yourself to investigate immediately. Let the Ray dealer, whose name and address are on the back of this folder, show you how cheaply he can furnish to you the economy and convenience of Ray automatic heat.

How the Ray Viscosity Valve System Saves Money for You

No. 5 and No. 6 fuel oils are like molasses. When warm, they flow freely. But when cold, they get thick and flow sluggishly. Ordinary metering devices, such as are used to regulate the flow of oil to automatic burners, are unable to cope with these varying conditions. If one of these devices is set to pass oil to a burner at a given rate when the oil is cold, which is the condition of every early morning start, along about noon, when the temperature of the oil is increased, the quantity passing through the metering device will also be increased, resulting in a smoky fire, poor combustion and waste fuel.

This waste is entirely eliminated by Ray Viscosity Valve System, because it assures a constant quantity at the burner of any oil that can be pumped, regardless of variations in the oil's viscosity or temperature. The fire is always the same. Combustion is complete. No fuel is wasted. The chart to the right shows results of actual laboratory tests. Note the constant metering of Ray Viscosity Valves. From 60° F. to 100° F. the maximum variation in oil delivery rate was only 7/100 gallon per hour, as compared with a maximum variation of 11% gallons per hour when using ordinary metering devices. All other conditions were identical.

**LABORATORY TEST COMPARING
METERING PROPERTIES OF RAY
VISCOSITY vs STANDARD VALVES**



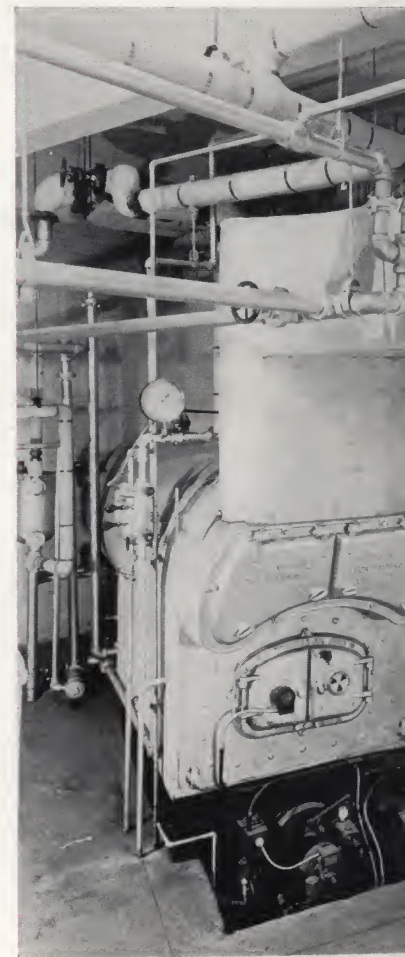
Compare Our with Ac

Compared with the ac
Ray Heavy Fuel Oil
as reported by their
for them become u



The Gray Herbarium, Harvard University

No Smoke



*The Commonwealth of Massachusetts
Department of Public Utilities
Division of Smoke Inspection
Twenty Third Floor
140 Federal St.*

Boston October 10, 1932.

Mr. Murray Brookman, President,
Ray Burner Company,
401 Bernal Avenue,
San Francisco, California.

Dear Mr. Brookman:

Yours of 15th at hand, and I wish to thank you for the information.

I really believe you have something that we have been looking for for a long while. The constant urge to use cheaper fuel, due to dull times, has forced me to recognize the use of this oil in low pressure plants, with your equipment, as heretofore I have put a ban on the use of heavy fuel oil in low pressure plants - not that I felt the manually operated job could not be run without smoke, but it just never is. It is simply a question of proper supervision. But now with your equipment and its performance in the finest district we have in this vicinity (I refer to the Gray Herbarium installation) I guess I have something to learn.

Nothing would please me more than to see this device installed in low pressure plants, especially those that are now hand operated.

I note what you say about the patent, and knowing how many of the oil burning concerns did work around your former types of equipment, I had hopes that you had this thing protected in such a way that nobody could encroach upon your rights.

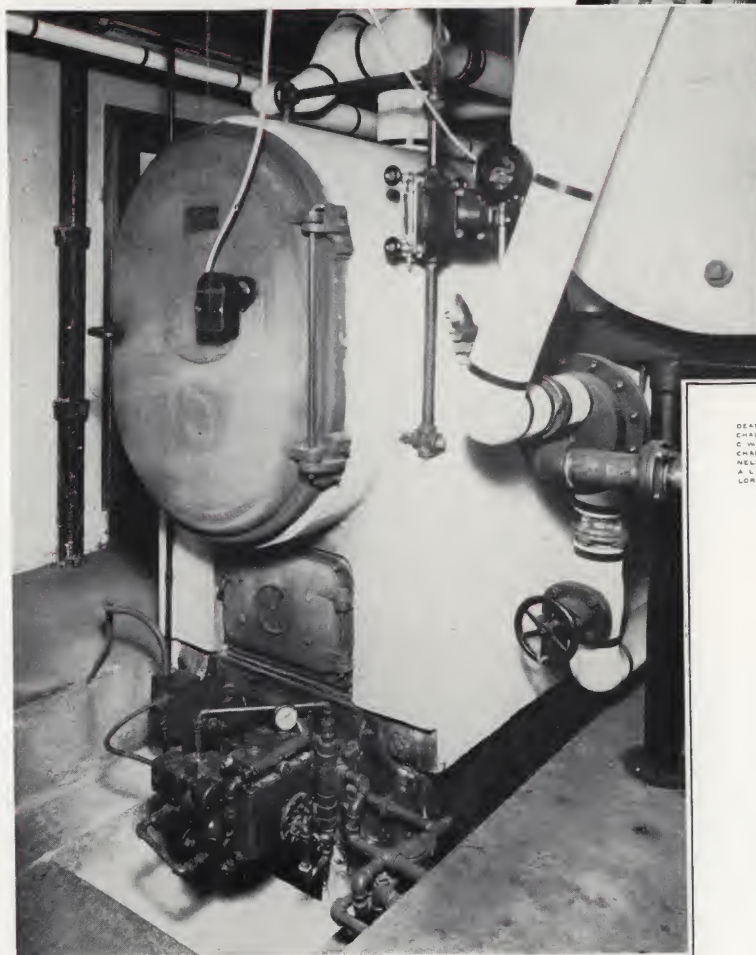
Very truly yours,

David A. Chapman
Director



Claims - - - Actual RESULTS

Actual performance of
Automatic Burners
owners, our claims
extra conservative.



Gleneagles Apartments, Portland, Ore.

Fuel Bill Cut in
Half →



DEAN VINCENT, PRESIDENT
CHAS. W. STEWART, VICE PRESIDENT
C. W. GORRUP, VICE PRESIDENT
CHARLES F. MILLMAN, VICE PRESIDENT
NELSON B. PINE, VICE PRESIDENT
A. L. FRALTY, SECRETARY
LORNE L. MILLER, ASST. SECY AND TRUST OFFICER



C. A. WOOD, ASST. SECRETARY
H. B. ROGERS, ASST. SECRETARY
C. F. VATES, ASST. TRUST OFFICER
MAURICE LAWRENCE, AUDITOR
C. J. IRELAND, EXCHG. OFFICER
C. D. MORRISON, COLLECTION DEPT. MANAGER
FRANK MONTGOMERY, SAFE DEPOSIT MANAGER

PORTLAND TRUST AND SAVINGS BANK

FORMERLY PORTLAND TRUST COMPANY OF OREGON

CAPITAL \$ 300,000.00

PORTLAND, OREGON

January 13th, 1933.

Campbell-Morquist & Company,
427 Morrison Street,
Portland, Oregon.

Gentlemen:

We wish to express our very complete satisfaction with the operation of the Ray fuel oil burner installed at the Gleneagles Apartments. This burner, as you know, is the full automatic type, equipped with viscosity valves. The Gleneagles is a court type building, containing twenty-one apartments, of five rooms each. Because of its design, the heat loss is much greater than in the ordinary apartment building. In spite of this, however, we have had no heating problems whatsoever, being able to keep an even temperature at all times, with a minimum consumption of fuel. We have checked over our records, and have found that in the two years in which we have operated the building, there has been only Two Dollars spent for service, this being for a minor adjustment. As we are handling a good sized number of apartments, and have become accustomed to paying out money each month for oil burner service, this record is especially impressive.

The results obtained at the Normandy Apartments in Vancouver, Washington, in which a Diesel burner was recently replaced by the same type Ray burner, have been very gratifying. The figures which we have kept for the six months period which the burner has been in operation, show that the cost of fuel consumption has been more than cut in half. In addition, there has been the extra satisfaction of constant performance, without the necessity of service calls, as formerly.

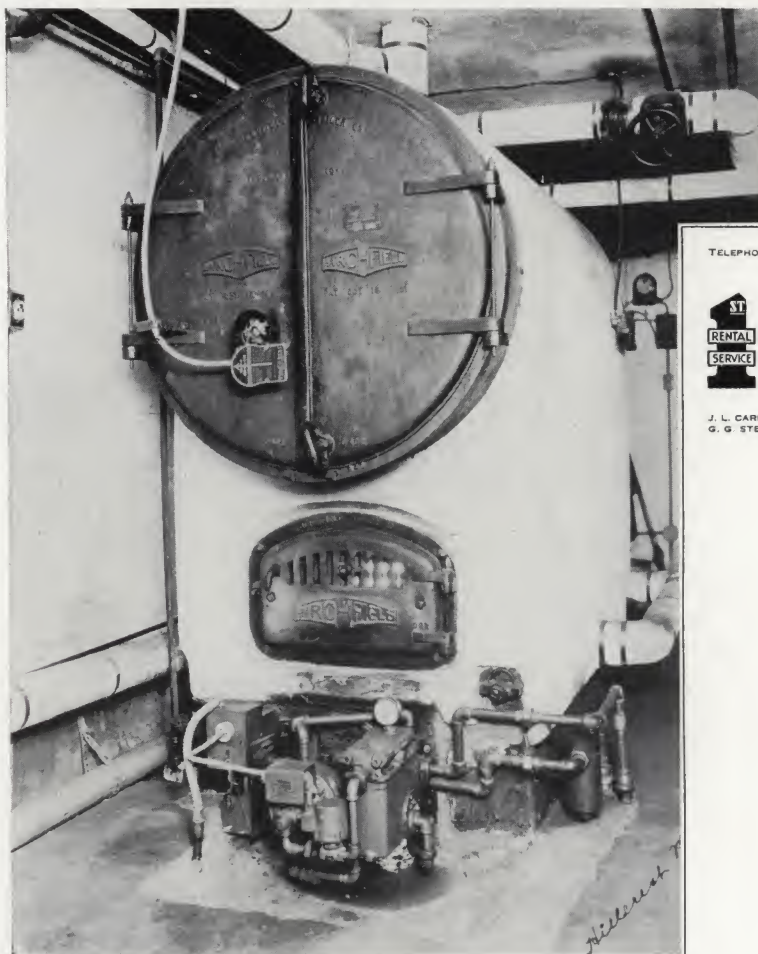
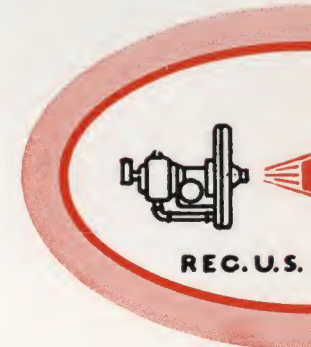
Yours very truly,

PORTLAND TRUST AND SAVINGS BANK



This letter expresses the opinion of one eminently qualified to judge. Though not himself owner of a Ray Heavy Fuel Oil Automatic, he is intimately acquainted with the performance of many makes of oil burners, particularly in regard to cleanliness of their combustion. His only interest is the elimination of smoke nuisances. He expresses no preference between makes, and his favorable opinion is to be secured only after he has been convinced by actual proof of satisfactory performance.

Once Building, B
"We can assure you t
operations we will be
your equipment insta
are indeed very much
Fulton Im



Hillcrest Manor Apartments, Seattle, Wash.

TELEPHONE SENECA 2666

OPEN EVENINGS AND SUNDAYS



FIRST RENTAL SERVICE

1116 VANCE BUILDING
SEATTLE, WASHINGTON

J. L. CARROLL, PRESIDENT
G. G. STENDER, MANAGER

December 20, 1932.

Hurley Engineering Company,
524 Virginia Street,
Seattle, Washington.

Gentlemen:

We are not hesitant in praising your new RAY automatic fuel oil burner, because we have found it is the only automatic burner that will burn any grade of fuel oil successfully under all conditions.

We are particularly pleased with the operation of the automatic viscosity compensators. On these installations where these compensators are being used, we find a greater degree of operating efficiency, as well as a greater economy. We find too, that it is seldom necessary to clean boiler tubes on these jobs because the fires burn clean and without any perceptible smoke.

We will gladly recommend your equipment at any time.

Yours very truly,

J. L. Carroll

Only Automatic
Burner That
Burn All Grades
of Fuel Oil
Satisfactorily



No Other
the Same
Fire D
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Oil's

at in all our future
very happy to have
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satisfied."
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Viscosity

We know of no better advice to offer to any-
one considering the purchase of an oil burner,
than that he profit by the experience of others
who have owned burners using lighter grades
of fuel oil, and who are now using Ray
Automatic Burners, equipped with the Vis-
cosity Valve System and burning heavy
fuel oil. Opinions from such sources are un-
likely to be influenced by pride of owner-
ship, but are based upon facts re-
sulting from comparison.

Phone, Fox Chase 1165 M



Now THE OXFORD LAUNDRY, Oxford Pike & Howell Streets

Philadelphia, Pa.,
December 23, 1932.

Commercial Burners, Inc.,
1515 Fairmount Avenue,
Philadelphia, Pennsylvania.

Gentlemen:

We are very well pleased with the results obtained
through the use of the #5 AR-130 Automatic RAY Oil Burner
which you installed in our high pressure boiler.

At the time we purchased the burner, you laid great
stress upon the advantages of the new type RAY Viscosity Valve
System, and we have found your claims entirely justified in
the results which we have obtained. We have observed no
change in the size of the fire due to fluctuations in oil vis-
cosities, notwithstanding that at one time a load of oil at
wide variance from our usual type was delivered by mistake.

As to the cost of operation, we did not purchase
this equipment on a savings basis. We increased our load
about the time the burner was installed, so that it is impos-
sible to get accurate comparisons. We believe, however, that
considerable saving in fuel cost has been made over the cost
of Buckwheat coal formerly burned.

We heartily recommend this equipment for satisfactory
results on heavier fuels.

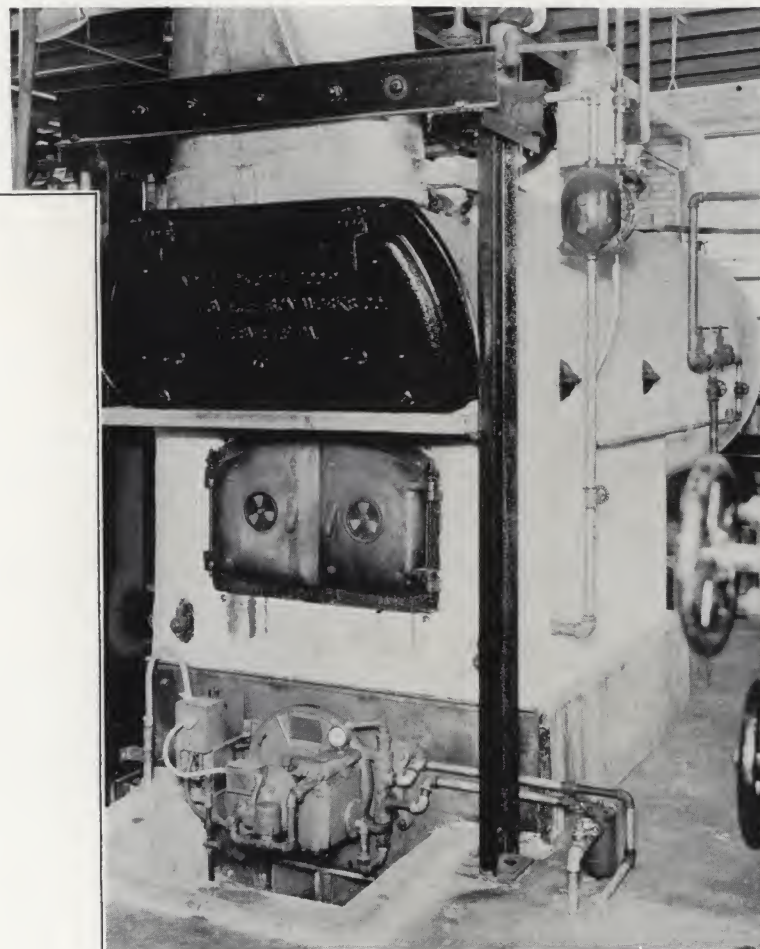
Very truly yours,
OXFORD LAUNDRY.

R. Tansey

RT:L

HPR:DAW

Appogero
Manager
Property Management Department



Oxford Laundry, Philadelphia, Pa.

"We are using the heavy No. 5 fuel oil, and although your burner is of the full automatic type, we are having absolutely no trouble of any nature."

LLOYD GOLF COURSE,
Portland, Oregon.



A Portland Apartment Goes Modern and Furnishes Better Heating Service at Lower Heating Cost

As conclusive proof of the economy possible through the use of a Ray Heavy Fuel Oil Automatic, as compared with other automatic burners which are limited to burning lighter fuel oil, ask anyone who has paid the fuel bills for both burners. He will give you an opinion based upon facts and expressed in dollars and cents saved. The table below is a typical example.

COMPARATIVE COST OF HEATING WITH HEAVY FUEL OIL AND DIESEL FUEL OIL

Name of Building: Parkview Apartments . . . Location: 424 Fargo Street, Portland, Oregon . . . Size and Construction: 50'x100', 3 Stories, Brick, 16 Apartments, 45 Rooms . . . Heating Plant: West Coast Tubular Steam Boiler, 500-gallon hot water tank.

Type of Burner	Grade of Oil	Test Period	Av. Mean Temp.	Gals. Used	Cost Per Gal.	Total Cost	Average Cost Per Mo. Per Room Per Mo.	
Diesel Oil Automatic	Diesel	5/1/31 to 12/31/31	55.2°	7345.5	\$.0395	\$290.15	\$36.27	\$.806
Ray Heavy Fuel Oil Automatic	Heavy Fuel Oil	5/1/32 to 12/31/32	54.1°	5805.6	\$.025	\$145.14	\$18.14	\$.403
Saving in Amounts				1539.9		\$145.01	\$18.13	\$.40
Saving in Percentage				20.9%		50%	50%	50%

Particular attention is called to the considerable difference in "Gallons Used." This is a natural result, partly due to the greater heat content of the heavy oil, but principally due to the superior metering properties of Ray Viscosity Valve System preventing waste of fuel.

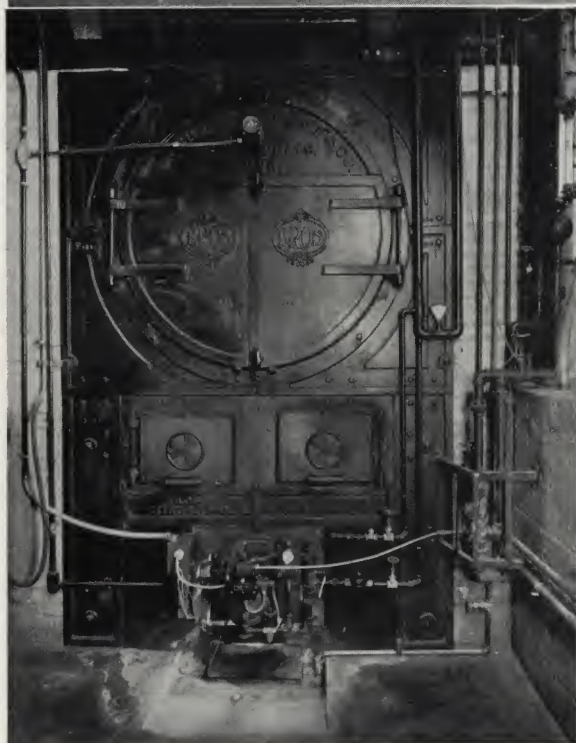
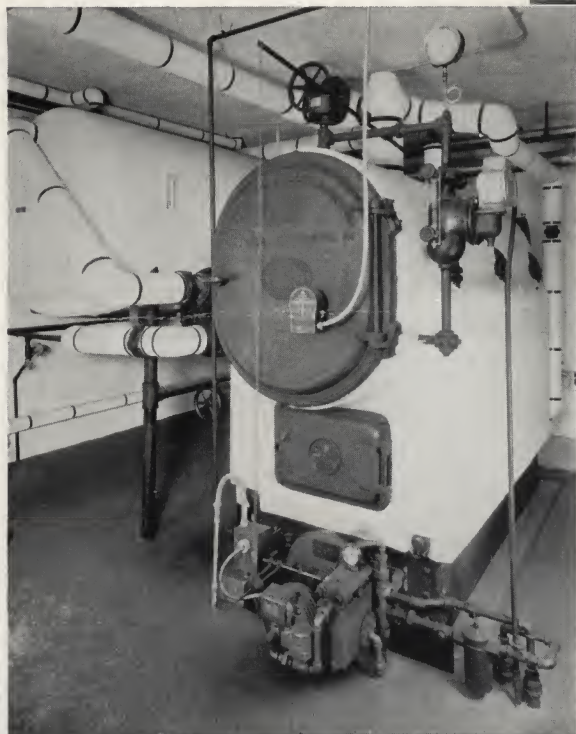
Other owners of Ray Heavy Fuel Oil Automatics are getting similar results. Phone or write to the Ray dealer in your territory. Let him tell you what this modern development in oil burning will do for you.

Manufactured by

RAY OIL BURNER COMPANY
401-409 BERNAL AVENUE SAN FRANCISCO, CALIF.

Sold by

CARR HEATING & OIL BURNERS, INC.
837 DRYADES ST. • NEW ORLEANS, LA.



"After continuous operation of your Ray Burner AR-131, equipped with your new viscosity valves, for the past two years, we wish to inform you that it leaves little to be desired or improved upon."

IRWIN-DICK CO.,
Minneapolis, Minnesota.

"We are using the heavy No. 5 fuel oil, and although your burner is of the full automatic type, we are having absolutely no trouble of any nature."

LLOYD GOLF COURSE,
Portland, Oregon.



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Modern
Service

of a Ray Heavy
burners which are
the fuel bills for
and expressed in

OIL

Portland, Oregon
Rooms . . . Heat-

Average Cost	
Per Mo.	Per Room
\$36.27	\$.806
\$18.14	\$.403
\$18.13	\$.40
50%	50%

Gallons Used."
of the heavy oil,
Viscosity Valve

similar results.
I you what this

PANY

401-407 BERNAL AVENUE

SAN FRANCISCO, CALIF.

Sold by

CARR HEATING & OIL BURNERS, INC.
837 DRYADES ST. • NEW ORLEANS, LA.

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